

**Attachment D**

**AMENDED AND NEW CLAIMS - clean copy:**

*B2* ~~Sub C1~~ 1. (Twice Amended) A lining for a furnace the lining having insulating material attached to an inside wall of the furnace, the insulating material in use having a hot face which faces inwardly of the furnace and a cold face at or adjacent the furnace wall, wherein a protective element is provided at least partially to cover the hot face, the protective element being secured relative to the hot face by a securing means which co-operates with a member which is embedded in the insulating material.

*B3* ~~Sub C1~~ 8. (Twice Amended) A lining according to claim 1 wherein the protective element is of plate configuration.

*B4* ~~Sub C1~~ 10. (Twice Amended) A lining according to claim 1 wherein the furnace lining includes a plurality of individual blocks or modules of insulating material, each attached at the inside wall of the furnace, each module including a ceramic blanket which is folded into a block with the folds extending transversely to the furnace wall.

*B5* ~~Sub C1~~ 13. (Amended) A lining according to claim 12 wherein the embedded member includes a generally elongate part.

14. (Amended) A lining according to claim 13 wherein the lining includes a ceramic blanket which is folded into a block, with the folds extending transversely to the furnace wall and the embedded member is forced into the insulating material with an elongate axis of the elongate part in an orientation generally aligned with the folds and is then rotated generally about an axis which is transverse to the elongate axis so that the elongate axis extends generally transverse to the folds.

*B6* ~~Sub C1~~ 15. (Twice Amended) A lining according to claim 13 wherein the embedded member is of at least a single plate construction and is made of a material which is sufficiently strong to resist pull-out forces.

*B7* ~~Sub C1~~ 17. (Twice Amended) A lining according to claim 1 wherein the protective element is secured relative to the hot face of the lining by adhesive cement in addition to the securing means.

*B6* Sbc 18. (Twice Amended) A lining for a furnace the lining including insulating material attached at an inside wall of the furnace, the insulating material in use having a hot face which faces inwardly of the furnace and a cold face at or adjacent the furnace wall, the lining including a protective element which at least partially covers the hot face, the protective element being secured relative to the hot face by means including a headed fastener having a shank which co-operates with a member which is embedded in the insulating material.

*B9* Sbc 19. (Twice Amended) A lining for a furnace having insulating material attached at an inside wall of the furnace, the insulating material in use having a hot face which faces inwardly of the furnace and a cold face at or adjacent the furnace wall, and wherein a protective element is provided at least partially to cover the hot face, the protective element being secured relative to the hot face by means including a member which is embedded in the insulating material and a securing means which is attached to a shank which is integral with or attached to the embedded member, the shank of the securing means passing through the protective element into engagement with the embedded member or the securing means.

*B10* Sbc 21. (Twice Amended) A method of lining a furnace wall including the steps of attaching insulating material at or adjacent a wall of the furnace, the insulating material in use having a hot face which faces inwardly of the furnace and a cold face at or adjacent the furnace wall, and wherein the method includes embedding in the insulating material a member which is adapted to co-operate with a securing means, providing a protective element at least partially to cover the hot face, securing the protective element to the hot face by attaching the securing means to the embedded member.

*B11* Sbc 25. (Twice Amended) A method according to claim 21 which includes attaching a shank to the embedded member, and engaging the securing means and the shank to secure the protective element to the hot face.

*B12* *Sbc1* 27. (Twice Amended) A method according to claim 21 wherein the furnace is modular having a plurality of modules or blocks of insulating material, and the method includes covering a substantial part of the furnace wall by a plurality of protective elements each secured at the hot face of the insulating material to at least one individual module, by means including a securing means which co-operates with a member which is embedded in the insulating material.

*B13* *Sbc1* 28. (Twice Amended) A method of lining a furnace wall including the steps of attaching insulating material at or adjacent a wall of the furnace, the insulating material in use having a hot face which faces inwardly of the furnace and a cold face at or adjacent the furnace wall, and wherein the method includes embedding in the insulating material a member which is adapted to co-operate with a securing means, providing a protective element at least partially to cover the hot face, securing the protective element to the hot face by attaching the securing means to the embedded member, wherein the furnace is modular having a plurality of modules or blocks of insulating material, wherein the method includes covering a substantial part of the furnace wall by a plurality of protective elements each secured at the hot face of the insulating material to at least one individual module, by means including a securing means which co-operates with a member which is embedded in the insulating material, wherein the embedded member is embedded in the insulating material by forcing the member into the insulating material and then rotating the member, and wherein the method includes inserting the member to be embedded when in an orientation generally aligned with folds in the insulating material and then rotating the member so that the member extends transversely to the folds.

*B14* *Sbc1* 31. (Twice Amended) A method of lining a furnace wall including the steps of attaching insulating material at or adjacent the wall of the furnace, the insulating material in use having a hot face which faces inwardly of the furnace and a cold face at or adjacent the face wall, and wherein the method includes embedding in the insulating material a member which is adapted to co-operate with a shank of a headed

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etc*  
fastener, providing a protective element at least partially to cover the hot face, securing the protective element to the hot face by inserting the shank of the headed fastener through the protective element into the insulating material so that the shank may co-operate with the embedded member.

*B5*  
*Sub C1* 32. (Twice Amended) A method of lining a furnace wall including the steps of attaching insulating material at or adjacent the wall of the furnace, the insulating material in use having a hot face which faces inwardly of the furnace and a cold face at or adjacent the furnace wall, and wherein the method includes embedding in the insulating material a member which is adapted to co-operate with a securing means, providing a protective element at least partially to cover the hot face, securing the protective element to the hot face by attaching the securing means to the embedded member such that the protective element is retained between the securing means or a part thereof and the hot face.

*B16*  
*Sub C1* 33. (Twice Amended) A method of repairing a lining of a furnace made by a method including the steps of attaching insulating material at or adjacent a wall of the furnace, the insulating material in use having a hot face which faces inwardly of the furnace and a cold face at or adjacent the furnace wall, and wherein the method includes embedding in the insulating material, a member which is adapted to co-operate with a securing means, providing a protective element at least partially to cover the hot face, securing the protective element to the hot face by attaching the securing means to the embedded member and wherein the embedded member is embedded in the insulating material by forcing the member into the insulating material and then rotating the member, which repair method includes the steps of removing the securing means, removing at least a layer of the protective element, and securing at least a replacement protective element layer to the hot face of the insulating material by a securing means which co-operates with a member which is embedded in the insulating material.

*SAC* 35. (Amended) A method of improving the thermal resistance of an existing furnace lining having insulating material attached to an inside wall of the furnace, the insulating material in use having a hot face which faces inwardly of the furnace and a cold face at or adjacent a furnace wall and the lining having a member which is adapted to co-operate with a securing means the method including providing a protective element at least partially to cover the hot face, the protective element being secured relative to the hot face by the securing means co-operating with the member which is embedded in the insulating material.

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